

Title (en)
Chemical mechanical polishing aqueous dispersion, chemical mechanical polishing method, and kit for preparing chemical mechanical polishing aqueous dispersion

Title (de)
Wässrige Dispersion für chemisch-mechanisches Polieren, chemisch-mechanisches Polierverfahren und Kit zur Zubereitung einer wässrigen Dispersion für chemisch-mechanisches Polieren

Title (fr)
Dispersion aqueuse par polissage chimico-mécanique, méthode de polissage chimico-mécanique et kit de préparation de la dispersion aqueuse par polissage chimico-mécanique

Publication
EP 1724317 A1 20061122 (EN)

Application
EP 06113995 A 20060516

Priority
JP 2005143580 A 20050517

Abstract (en)
A chemical mechanical polishing aqueous dispersion, including: (A) inorganic particles; (B) at least one type of particles selected from the group consisting of organic particles and organic-inorganic composite particles; (C) at least one compound selected from the group consisting of quinolinecarboxylic acid, quinolinic acid, a divalent organic acid (excluding quinolinic acid), and a hydroxyl acid; (D) at least one compound selected from the group consisting of benzotriazole and benzotriazole derivatives; (E) an oxidizing agent; and (F) water, the chemical mechanical polishing aqueous dispersion containing the component (A) in an amount of 0.05 to 2.0 wt% and the component (B) in an amount of 0.005 to 1.5 wt%, having a ratio (W A /W B) of the amount (W A) of the component (A) to the amount (W B) of the component (B) of 0.1 to 200, and having a pH of 1.0 to 5.0.

IPC 8 full level
C09G 1/02 (2006.01); **C09K 3/14** (2006.01); **H01L 21/321** (2006.01)

CPC (source: EP KR US)
C09G 1/02 (2013.01 - EP US); **C09K 3/1463** (2013.01 - EP US); **H01L 21/304** (2013.01 - KR); **H01L 21/3212** (2013.01 - EP US)

Citation (search report)

- [X] EP 1386949 A2 20040204 - JSR CORP [JP]
- [X] US 2005037693 A1 20050217 - UCHIKURA KAZUHITO [JP], et al
- [X] US 2002173241 A1 20021121 - COSTAS WESLEY D [US], et al
- [PX] EP 1586614 A1 20051019 - JSR CORP [JP]

Cited by
EP2017318A3; KR101469994B1; CN101469252A; EP2794733A4; US8470195B2

Designated contracting state (EPC)
DE FR GB IT

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1724317 A1 20061122; EP 1724317 B1 20081022; CN 1881539 A 20061220; DE 602006003258 D1 20081204; KR 20060119774 A 20061124; TW 200700545 A 20070101; US 2006276041 A1 20061207

DOCDB simple family (application)
EP 06113995 A 20060516; CN 200610080578 A 20060517; DE 602006003258 T 20060516; KR 20060043714 A 20060516; TW 95117407 A 20060517; US 43350806 A 20060515